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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,766	06/06/2006	Yong Hwan Kim	930086-2028	8494

7590 07/21/2008

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EXAMINER	
HEINCER, LIAM J	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
07/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed July 14, 2008 have been fully considered but they are not persuasive, because:

A) In response to applicant's argument that Gijutsu et al. and Sjøholm et al. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, In this case, Gijutsu et al. and Sjøholm et al. are combinable as they are concerned with a similar technical difficulty, namely increasing the oxidative properties of a peroxide through the use of peroxidase enzyme catalysts. Gijutsu et al. teaches the enzymic catalyst as oxidatively polymerizing the monomers (¶0006). Therefore, Gijutsu et al. would implicitly be concerned with methods to increase the yield of the reaction by increasing the ability of the catalyst system to oxidize the reaction. Sjøholm et al. teaches that oxidative capacity of a peroxide and perxoidase system can be increased by using the claimed phenothiazine derivative (4:6-13). Therefore, a person having ordinary skill in the art at the time of invention would have found the teaching of Sjøholm et al. to be reasonably pertinent to the teachings of Gijutsu et al., and the two references would be considered analogous art.

B) Applicant's argument that Sjøholm et al. do not teach the phenothiazine derivative as increasing the efficiency of the peroxidase is not persuasive. In the passage reproduced in the applicants arguments Sjøholm et al. teaches that the "addition of another oxidizable substrate…may enhance the bleaching effect of the peroxidase employed" (4:1-5). Therefore it is clear that the addition of the phenothiazine derivative (the oxidizable substrate) will enhance the bleaching (oxidative) effects of the peroxidase.

Additionally, applicant's argument that the peroxidase is enhancing the oxidative properties of the peroxide is not germane. In Gijutsu et al. the peroxide and peroxidase

are being used as a catalyst system. It is immaterial which of the two components is being enhanced by the addition of additives as they are being used in both Gijutsu et al. and Sjøholm et al. together as an oxidative system. The addition of the derivative would increase the oxidative effect of the system regardless of the mechanism.

C) Applicant's argument that superiority of a property is evidence for nonobviousness is not persuasive. MPEP § 716.02(a), cited by the applicant (Remarks, page 6) teaches that "evidence of unobvious or unexpected advantageous properties, such as superiority in a property the claimed compound shares with the prior art, can rebut *prima facie* obviousness". The key phrase is "evidence of *unobvious or unexpected* advantageous properties " (emphasis added). It is clear from Sjøholm et al. that the addition of 10-propionic acid phenolthiazine will increase the oxidative property of the catalyst system (4:1-15), and therefore the yield of the reaction. Based on this teaching, a person having ordinary skill in the art at the time of invention would have expected the addition of 10-propionic acid phenolthiazine to have increased the yield of the reaction. The data of table 3 describing the change in yield is not sufficient to show that the degree of change was unexpected.

D) Applicant's argument that the entire merits of the matter were not reweighed is not persuasive. After considering applicants response to the original rejection, the rejection was deemed valid and therefore maintained. The reasons for the maintaining of the rejection were presented in the response to arguments section of the final rejection, while the rejection itself was left substantially the same.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO, Ph.D./ LJH
Supervisory Patent Examiner, Art Unit 1796 July 16, 2008
17-Jul-08